



Application #: 09/875,519  
Title: Down-Regulation Resistant C-3 Convertase  
Inventor: Farries et al.  
Docket #: 4-30443B  
Attorney: Susan L. Hess (862) 778-7859

10	20	30	40	50	60
MGPTSGPSLL	LLLLTHLPLA	LGSPMYSIIT	PNILRLESEE	TMVLEAHDAQ	GDVPVTVTVH
70	80	90	100	110	120
DFPGKKLVLS	SEKTVLTPAT	NHMGNVFTTI	PANREFKSEK	GRNKFVTVQA	TFGTQVVEKV
130	140	150	160	170	180
VLVSLQSGYL	FIQTDKTIYT	PGSTVLYRIF	TVNHKLLPVG	RTVMVNIENP	EGIPVKQDSL
190	200	210	220	230	240
SSQNQLGVLP	LSWDIPELVN	MGQWKIRAYY	ENSPQQVFST	EFEVKEYVLP	SFEVIVEPTE
250	260	270	280	290	300
KFYIYNEKG	LEVTITARFL	YGKKVEGTAF	VIFGIQDGEQ	RISLPESLKR	IPIEDGSGEV
310	320	330	340	350	360
VLSRKVLDDG	VQNPRAEDLV	GKSLYVSATV	ILHSGSDMVQ	AERSGPIVIT	SPYQIHFTKT
370	380	390	400	410	420
PKYFKPGMPF	DLMVFVTNPD	GSPAYRVPVA	VQGEDTVQSL	TQGDGVAKLS	INTHPSQKPL
430	440	450	460	470	480
SITVRTKKQE	LSEAEQATRT	MQALPYSTVG	NSNNYLHLSV	LRTELRPGET	LNVNFLLRMD
490	500	510	520	530	540
RAHEAKIRYY	TYLIMNKGRL	LKAGRQVREP	GQDLVVLPVS	ITTDFIPSFR	LVAYYTLIGA
550	560	570	580	590	600
SGQREVADS	VWVDVKDSCV	GSLVVKSGQS	EDRQVPVPGQ	MTLKIEGDHG	ARVVLVAVDK
610	620	630	640	650	660
GVFVLNKKNK	LTQSKIWDVV	EKADIGCTPG	SGKDYAGVFS	DAGLTFTSSS	GQTAQRAEL
670	680	690	700	710	720
QCPQPAARRR	RSVQLTEKRM	DKVGKYPKEL	RKCCEDGMRE	NPMRFSCQRR	TRFISLGEAC
730	740	750	760	770	780
KKVFLDCCNY	ITELRRQHAR	ASHLGLARSN	LDEDIIAEEN	IVSRSEFPES	WLWNVEDLKE
790	800	810	820	830	840
PPKNGISTKL	MNIFLKDSIT	TWEILAVSMS	DKKGICVADP	FEVTVMQDFF	IDLRLPYSVV
850	860	870	880	890	900
RNEQVEIRAV	LYNYRQNQEL	KVRVELLHNP	AFCSLATTKR	RHQQTITIPP	KSSLSVPYVI
910	920	930	940	950	960
VPLKTGLQEV	EVKAAVYHHF	ISDGVKSLK	VVPEGIRMNK	TVAVRTLDP	RLGREGVQKE

FIG. 1A

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970	980	990	1000	1010	1020
DIPPADLSDQ	VPDTESETRI	LLQGTPVAQM	TEDAVIDAERL	KHLIVTPSGC	GEQNMIGMTP
1030	1040	1050	1060	1070	1080
TVIAVHYLDE	TEQWEKFGLE	KRQGALELIK	KGYTQQLAFR	QPSSAFAAFV	KRAPSTWLTA
1090	1100	1110	1120	1130	1140
YVVKVFS LAV	NLIAIDSQVL	CGAVKWLILE	KQKPDGVFQE	DAPVIHQEMI	GGLRNNNEKD
1150	1160	1170	1180	1190	1200
MALTAFLVIS	LQEAKDICEE	QVNSLPGSIT	KAGDFLEANY	MNLQRSYTVA	IAGYALAQMG
1210	1220	1230	1240	1250	1260
RLKGPLL NKF	LTTAKDKNRW	EDPGKQLYNV	EATSYALLAL	LQLKDFDFVP	PVVRWLNEQR
1270	1280	1290	1300	1310	1320
YYGGGYGSTQ	ATFMVFQALA	QYQKDAPDHQ	ELNLDVSLQL	PSRSSKITHR	IHWESASLLR
1330	1340	1350	1360	1370	1380
SEETKENEGF	TVTAEGKGQG	TLSVVTMYHA	KAKDQLTCNK	FDLKVTIKPA	PETEKRPQDA
1390	1400	1410	1420	1430	1440
KNTMILEICT	RYRGDQDATM	SILDISM MTG	FAPDTDDLKQ	LANGVDRIYS	KYELDKAFSD
1450	1460	1470	1480	1490	1500
RNTLIIYLDK	VSHSEDDCLA	FKVHQYFNVE	LIQPGAVKVY	AYYNLEESCT	RFYHPEKEDG
1510	1520	1530	1540	1550	1560
KLNLKCRDEL	CRCAEENC FI	QKSDDKVTLE	ERLDKACEPG	VDYVYKTRLV	KVQLSNDFDE
1570	1580	1590	1600	1610	1620
YIMAIEQTIK	SGSDEVQVGQ	QRTFISPIKC	REALKLEEKK	HYLMWGLSSD	FWGEKPNLSY
1630	1640	1650	1660		
IIGKDTWVEH	WPEDDECQDE	ENQKQCQDLG	AFTESMVVFG		

FIG.1B

cctctccct	ctgtccctct	gtccctctga	cactgcactg	tcccagcacc	
12	20	30	40	50	60
atgggaccca	cctcaggtcc	cagcctgctg	ctcctgctac	taaccacact	ccccctggct
70	80	90	100	110	120
ctggggagtc	ccatgtactc	tatcatcacc	cccaacatct	tgaggatgga	gagcgaggag
130	140	150	160	170	180
accatggtgc	tggaggccca	cgacgcgcaa	ggggatgttc	cagtcactgt	tactgtccac
190	200	210	220	230	240
gacatcccag	geaaaaaact	agtgatgtcc	agtgagaaga	ctgtgctgac	ccctgacacc
250	260	270	280	290	300
aaccacatgg	gaaacgtcac	cttcacgac	ccagccaaca	gggagttcaa	gtcagaaaag
310	320	330	340	350	360
gggcgcaaca	agtacgtgac	cgtgcaggcc	accttcggga	ccaagtggg	ggagsaggtg
370	380	390	400	410	420
gtgctgggtca	gcctgcagag	cgggtacctc	tccatccaga	cagacaagac	catctacacc
430	440	450	460	470	480
cctggctcca	cagttctcta	taggatcttc	accgecaacc	acaagctgat	accctggggc
490	500	510	520	530	540
cggacggtca	tggccaacat	tgagaacccg	gaaggcatcc	cggccaagca	ggactccttg
550	560	570	580	590	600
tcttatcaga	accagcttgg	cgtcttgccc	ttgtcttggg	acattccgga	actcgacaac
610	620	630	640	650	660
atgggccagt	ggaagatccg	agcctactat	geaaactcac	cacagcaggt	cttctccact
670	680	690	700	710	720
gagtttgagg	tgaaggagta	cgtgctgccc	agtttcgagg	tcatagtgga	gactacagag
730	740	750	760	770	780
aatcatact	acatctataa	cgagaagggc	ctggagggtca	ccatcacagc	caggatcctc
790	800	810	820	830	840
taagggaaga	aagtggaggg	aactgccttt	gtcatattcg	ggatccagga	tggcgaacag
850	860	870	880	890	900
aggattcccc	tgcctgaatc	cctcaagcgc	atcccgattg	aggatggctc	gggggaggtt
910	920	930	940	950	960

FIG.2A

gtgctgagcc 970	ggaaggtact 980	gctggacggg 990	gtgcagaacc 1000	ccagagcaga 1010	agacctggtg 1020
gggaagtctt 1030	tgtacgtgtc 1040	tgccaccgtc 1050	atcttgaact 1060	caggcagtga 1070	catggtgcag 1080
gcagagcgca 1090	gcgggatccc 1100	catcgtgacc 1110	tctccctacc 1120	agatccactt 1130	caccaagaca 1140
cccaagtact 1150	tcaaaccagg 1160	aatgcccttt 1170	gacctcatgg 1180	tgttcgtgac 1190	gaaccctgat 1200
ggatctccag 1210	cctacagagt 1220	ccaagtggca 1230	gtccagggag 1240	aggacactgt 1250	gcagtctcta 1260
accagggag 1270	atggcgtggc 1280	caaactcagc 1290	atcaacacac 1300	accccagcca 1310	gaagcccttg 1320
agcatcacgg 1330	tgcgcacgaa 1340	gaagcaggag 1350	ctctcggagg 1360	cagagcaggc 1370	taccaggacc 1380
atgcaggctc 1390	tgccctacag 1400	caccgtgggc 1410	aactccaaca 1420	attacctgca 1430	tctctcagtg 1440
ctacgtacag 1450	agatcagacc 1460	cggggagacc 1470	ctcaacgtca 1480	acttcctcct 1490	gcgaatggac 1500
cgcgccacg 1510	aggccaagat 1520	ccgctactac 1530	acctacctga 1540	tcatgaacaa 1550	gggcaggctg 1560
ttgaaggcgg 1570	gacgccaggt 1580	gcgagagccc 1590	ggccaggacc 1600	tggtggtgct 1610	gcccctgtcc 1620
atcaccaccg 1630	acttcatccc 1640	tcccttcgcg 1650	ctggtggcgt 1660	actacacgct 1670	gacggtgcc 1680
agcggccaga 1690	gggaggtggt 1700	ggccgactcc 1710	gtgtgggtgg 1720	acgtcaagga 1730	ctcctgcgtg 1740
ggctcgctgg 1750	tggtaaaaag 1760	cggccagtca 1770	gaagaccggc 1780	agcctgtacc 1790	tgggcagcag 1800
atgaccctga 1810	agatagaggg 1820	tgaccacggg 1830	gcccgggtgg 1840	tactggtggc 1850	cgtggacaag 1860
ggcgtgttcg 1870	tgctgaataa 1880	gaagaacaaa 1890	ctgacgcaga 1900	gtaagatctg 1910	ggacgtggtg 1920

FIG.2B

gagaaggcag	acatcggctg	caccccgggc	agtgggaagg	attacgccgg	tgtcttctcc
1930	1940	1950	1960	1970	1980
gacgcagggc	tgaccttcac	gagcagcagt	ggccagcaga	ccgcccagag	ggcagaactt
1990	2000	2010	2020	2030	2040
cagtgtcccgc	agccagccgc	ccgcccagcg	cgttccgtgc	agctcacgga	gaagcgaatg
2050	2060	2070	2080	2090	2100
gacaaagtcg	gcaagtaccc	caaggagctg	cgcaagtgct	gcgaggaccg	catgcgggag
2110	2120	2130	2140	2150	2160
aaccccatga	ggttctcgtg	ccagcgccgg	accggttcca	tctccctggg	cgaggcgtgc
2170	2180	2190	2200	2210	2220
aagaaggtct	tcctggactg	ctgcaactac	atcacagagc	tgcggcggca	gcacgcgcgg
2230	2240	2250	2260	2270	2280
gccagccacc	tgggcctggc	caggagtaac	ctggatgagg	acatcattgc	agaagagaac
2290	2300	2310	2320	2330	2340
atcgtttccc	gaagtgagtt	cccagagagc	tggctgtgga	acgttgagga	cttgaaagag
2350	2360	2370	2380	2390	2400
ccaccgaaaa	atggaatctc	tacgaagctc	atgaatatat	ttttgaaaga	ctccatcacc
2410	2420	2430	2440	2450	2460
acgtgggaga	ttctggctgt	gagcatgtcg	gacaagaaag	ggatctgtgt	ggcagacccc
2470	2480	2490	2500	2510	2520
ttcgaggtca	cagtaatgca	ggacttcttc	atcgacctgc	ggctacccta	ctctgttggt
2530	2540	2550	2560	2570	2580

FIG.2C

cgaacgagc 2590	aggtggaat 2600	ccgagccgtt 2610	ctctacaatt 2620	accggcagaa 2630	ccaagagctc 2640
aaggtgaggg 2650	tggaactact 2660	ccacaatcca 2670	gccttctgca 2680	gcctggccac 2690	caccaagagg 2700
cgtcaccagc 2710	agaccataac 2720	catccccccc 2730	aagtcctcgt 2740	tgtccgttcc 2750	atatgtcatc 2760
gtgccgctaa 2770	agaccggcct 2780	gcaggaagtg 2790	gaagtcaagg 2800	ctgctgtcta 2810	ccatcatttc 2820
atcagtgacg 2830	gtgtcaggaa 2840	gtccctgaag 2850	gtcgtgccgg 2860	aaggaatcag 2870	aatgaacaaa 2880
actgtggctg 2890	ttcgcaccct 2900	ggatccagaa 2910	cgcctgggcc 2920	gtgaaggagt 2930	gcagaaagag 2940
gacatcccac 2950	ctgcagacct 2960	cagtgaccaa 2970	gtcccggaca 2980	ccgagtctga 2990	gaccagaatt 3000
ctcctgcaag 3010	ggaccccagt 3020	ggcccagatg 3030	acagaggatg 3040	ccgtcgacgc 3050	ggaacggctg 3060
aagcacctca 3070	ttgtgacccc 3080	ctcgggctgc 3090	ggggaacaga 3100	acatgatcgg 3110	catgacgccc 3120
acggtcatcg 3130	ctgtgcatta 3140	cctggatgaa 3150	acggagcagt 3160	gggagaagtt 3170	cggcctagag 3180
aagcggcagg 3190	gggccttgga 3200	gctcatcaag 3210	aaggggtaca 3220	cccagcagct 3230	ggacttcaga 3240
caaccagct 3250	ctgcctttgc 3260	ggccttcgtg 3270	aaacgggcac 3280	ccagcacctg 3290	gctgaccgcc 3300
tacgtggtca 3310	aggtcttctc 3320	tctggctgtc 3330	aacctcatcg 3340	ccatcgactc 3350	ccaagtcctc 3360
tgcggggctg 3370	ttaaatggct 3380	gatacctggag 3390	aagcagaagc 3400	ccgacggggg 3410	cttccaggag 3420
gatgcgcccg 3430	tgatacacca 3440	agaaatgatt 3450	ggtggattac 3460	ggaacaacaa 3470	cgagaaagac 3480
atggccctca 3490	cggcctttgt 3500	tctcatctcg 3510	ctgcaggagg 3520	ctaaagatat 3530	ttgcgaggag 3540

FIG.2D

caggtcaaca 3550	gcctgccagg 3560	cagcatcact 3570	aaagcaggag 3580	acttccttga 3590	agccaactac 3600
atgaacctac 3610	agagatccta 3620	cactgtggcc 3630	attgctggct 3640	atgctctggc 3650	ccagatgggc 3660
aggctgaagg 3670	ggcctcttct 3680	taacaaattt 3690	ctgaccacag 3700	ccaaagataa 3710	gaaccgctgg 3720
gaggaccctg 3730	gtaagcagct 3740	ctacaacgtg 3750	gaggccacat 3760	cctatgccct 3770	cttggcccta 3780
ctgcagctaa 3790	aagactttga 3800	ctttgtgcct 3810	cccgtcgtgc 3820	gttggctcaa 3830	tgaacagaga 3840
tactacggtg 3850	gtggctatgg 3860	ctctaccag 3870	gccacattca 3880	tggtgttcca 3890	agccttggct 3900
caatacaaaa 3910	aggacgcccc 3920	tgaccaccag 3930	gaactgaacc 3940	ttgatgtgtc 3950	cctccaactg 3960
cccagccgca 3970	gctccaagat 3980	cacccaccgt 3990	atccactggg 4000	aatctgccag 4010	cctcctgcga 4020
tcagaagaga 4030	ccaaggaaaa 4040	tgagggtttc 4050	acagtcacag 4060	ctgaaggaaa 4070	aggccaaggc 4080
accttgctcg 4090	tggtgacaat 4100	gtaccatgct 4110	aaggccaaag 4120	atcaactcac 4130	ctgtaataaa 4140
ttcgacctca 4150	aggtcaccat 4160	aaaaccagca 4170	ccggaaacag 4180	aaaagaggcc 4190	tcaggatgcc 4200
aagaacacta 4210	tgatccttga 4220	gatctgtacc 4230	aggtaccggg 4240	gagaccagga 4250	tgccactatg 4260
tctatattgg 4270	acatatccat 4280	gatgactggc 4290	tttgctccag 4300	acacagatga 4310	cctgaagcag 4320
ctggccaatg 4330	gtgttgacag 4340	atacatctcc 4350	aagtatgagc 4360	tggacaaagc 4370	cttctccgat 4380
aggaacaccc 4390	tcatcatcta 4400	cctggacaag 4410	gtctcacact 4420	ctgaggatga 4430	ctgtctagct 4440
ttcaaagttc 4450	accaatactt 4460	taatgtagag 4470	cttatccagc 4480	ctggagcagt 4490	caaggtctac 4500

FIG.2E

gcctattaca acctggagga aagctgtacc cggttctacc atccggaaaa ggaggatgga  
4510 4520 4530 4540 4550 4560

aagctgaaca agctctgccg tgatgaactg tgccgctgtg ctgaggagaa ttgcttcata  
4570 4580 4590 4600 4610 4620

caaaagtcgg atgacaaggt caccctggaa gaacggctgg acaaggcctg tgagccagga  
4631 4640 4650 4660 4670 4680

gtggactatg tgtacaagac ccgactggtc aaggtacagc tgtccaatga ctttgacgag  
4691 4700 4710 4720 4730 4740

tacatcatgg ccattgagca gaccatcaag tcaggctcgg atgagggtgca ggttggacag  
4750 4760 4770 4780 4790 4800

cagcgcacgt tcatcagccc catcaagtgc agagaagccc tgaagctgga ggagaagaaa  
4810 4820 4830 4840 4850 4860

cactacctca tgtgggggtct ctcctccgat ttctggggag agaagcccaa cctcagctac  
4870 4880 4890 4900 4910 4920

atcatcgga aggacacttg ggtggagcac tggcctgagg aggacgaatg ccaagacgaa  
4930 4940 4950 4960 4970 4980

gagaaccaga aacaatgcca ggacctcggc gccttcaccg agagcatggt tgtctttggg  
4990 5000 5010 5020 5030 5040

tgccccaact gaccacaccc ccattcc  
5050 5060

FIG.2F



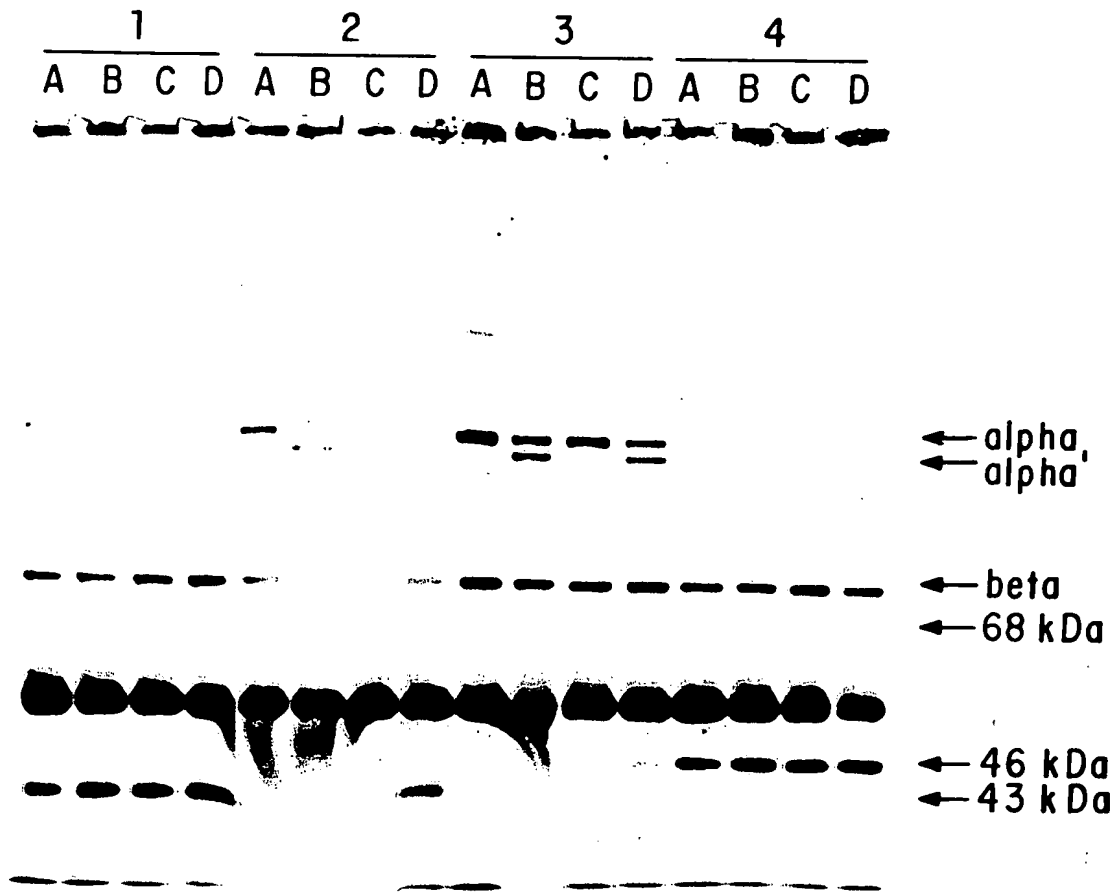


FIG.3

Site 1:	R	Q	Y	G	C	W	E	R
Site 2:	Q	Q	Q	Q	Q	Q	Q	R

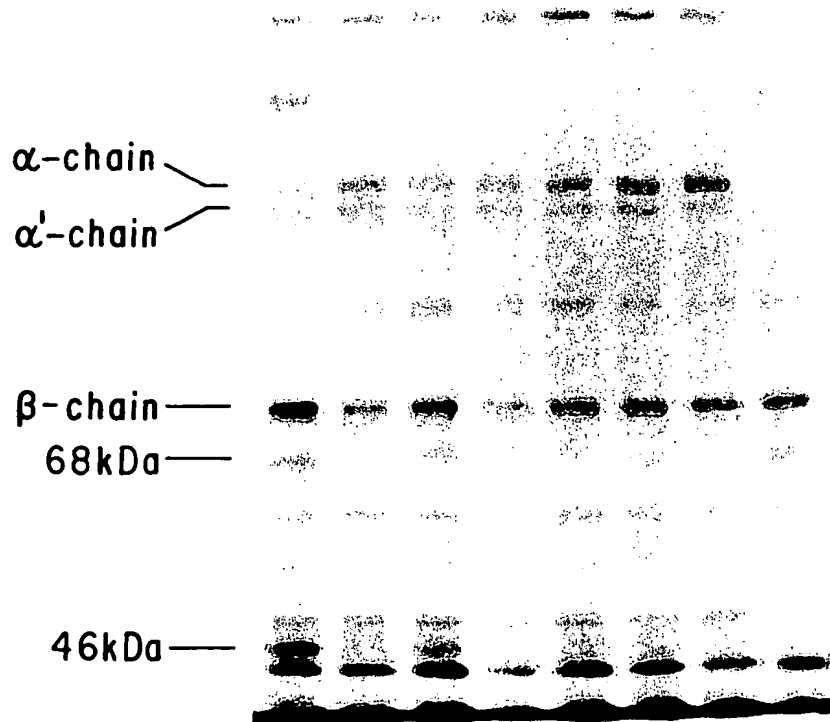


FIG.4

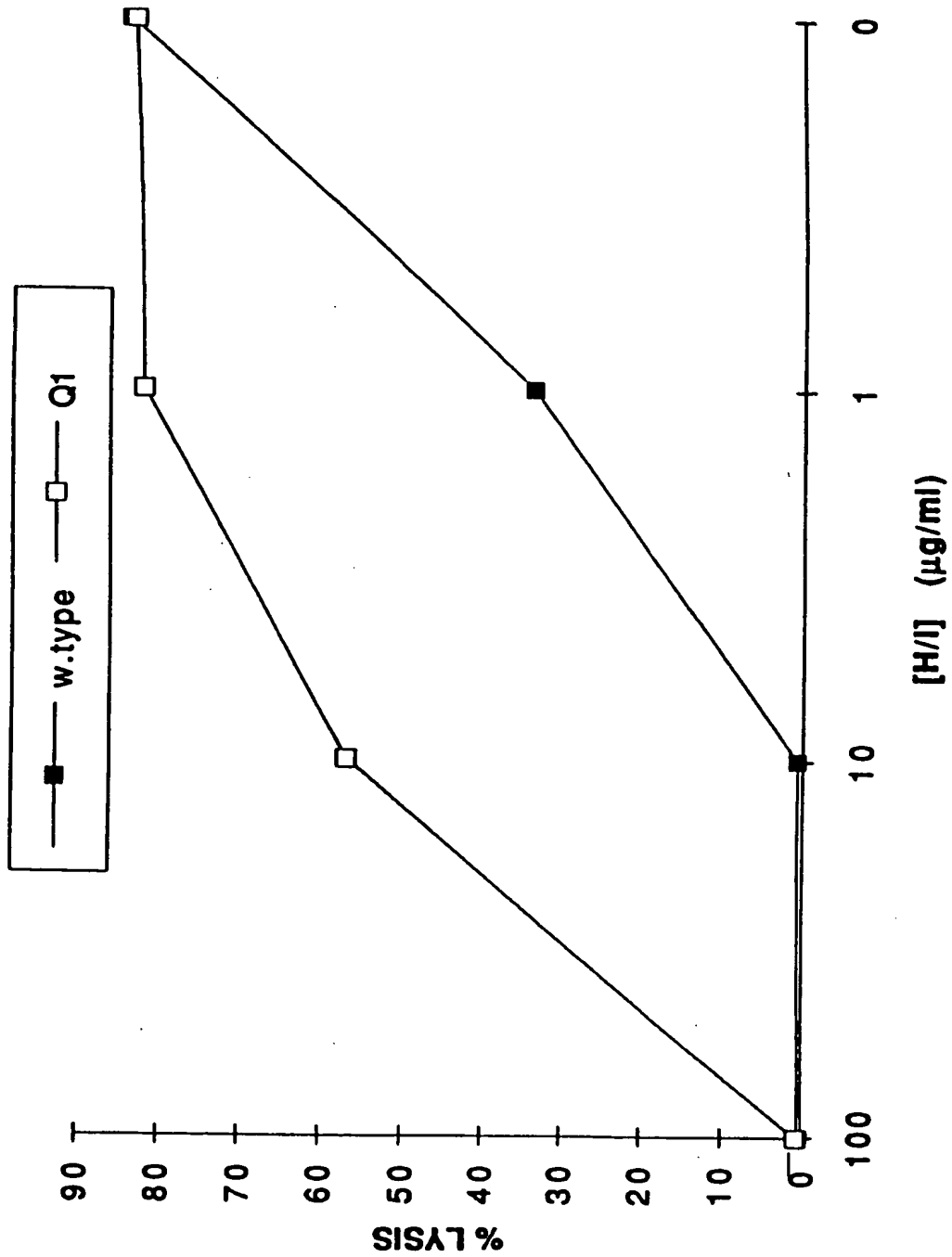


FIG.5

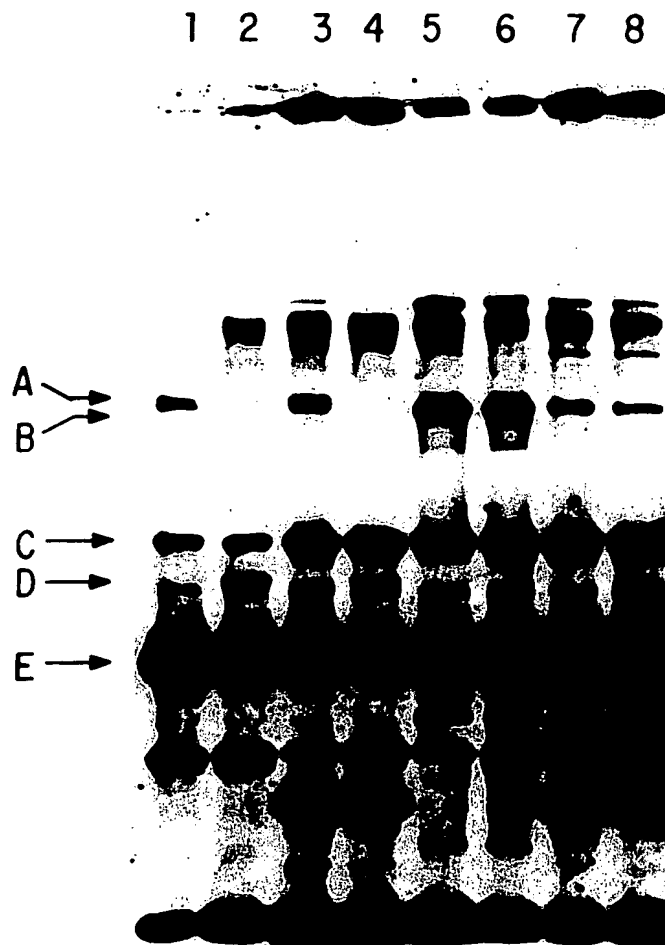


FIG.6

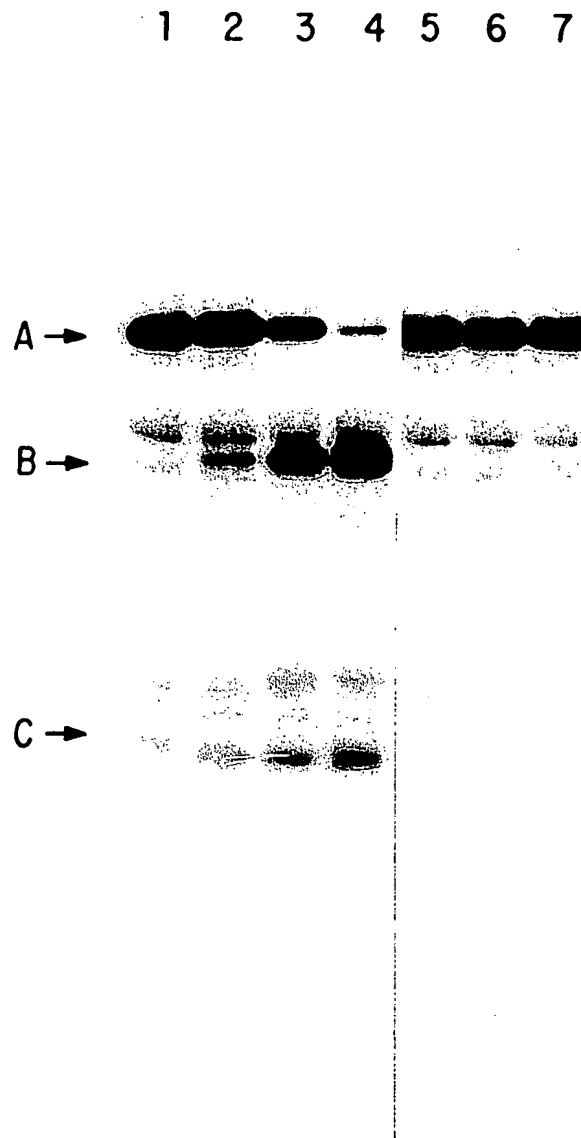


FIG.7

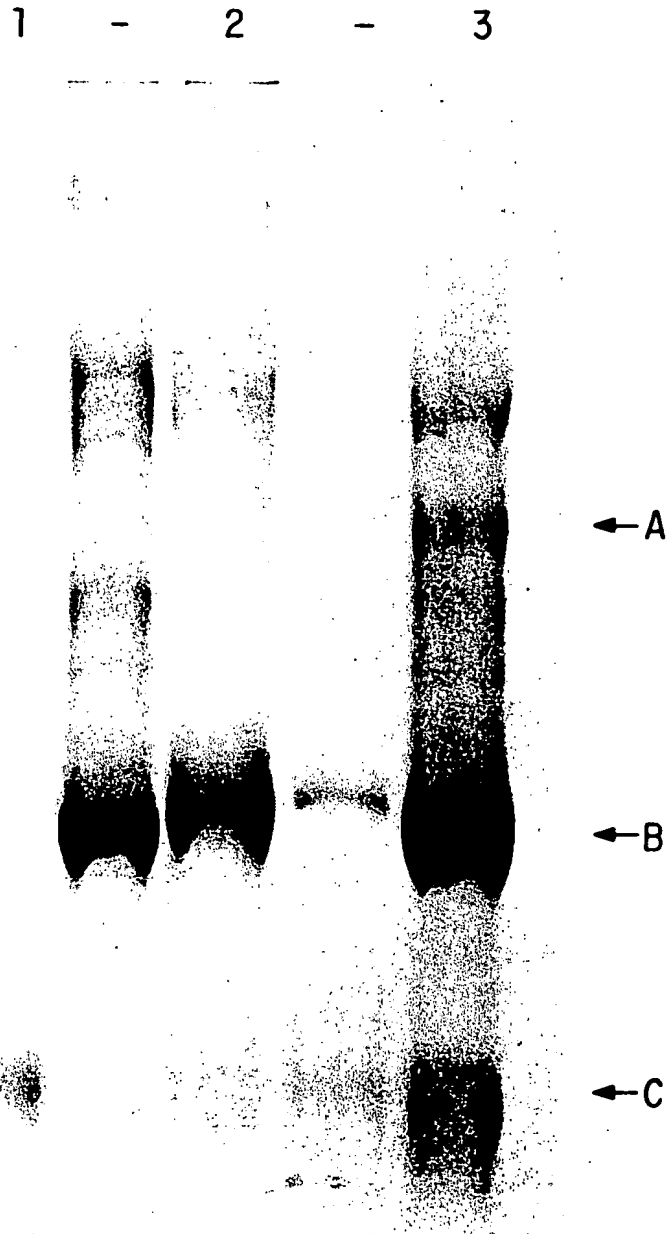


FIG.8

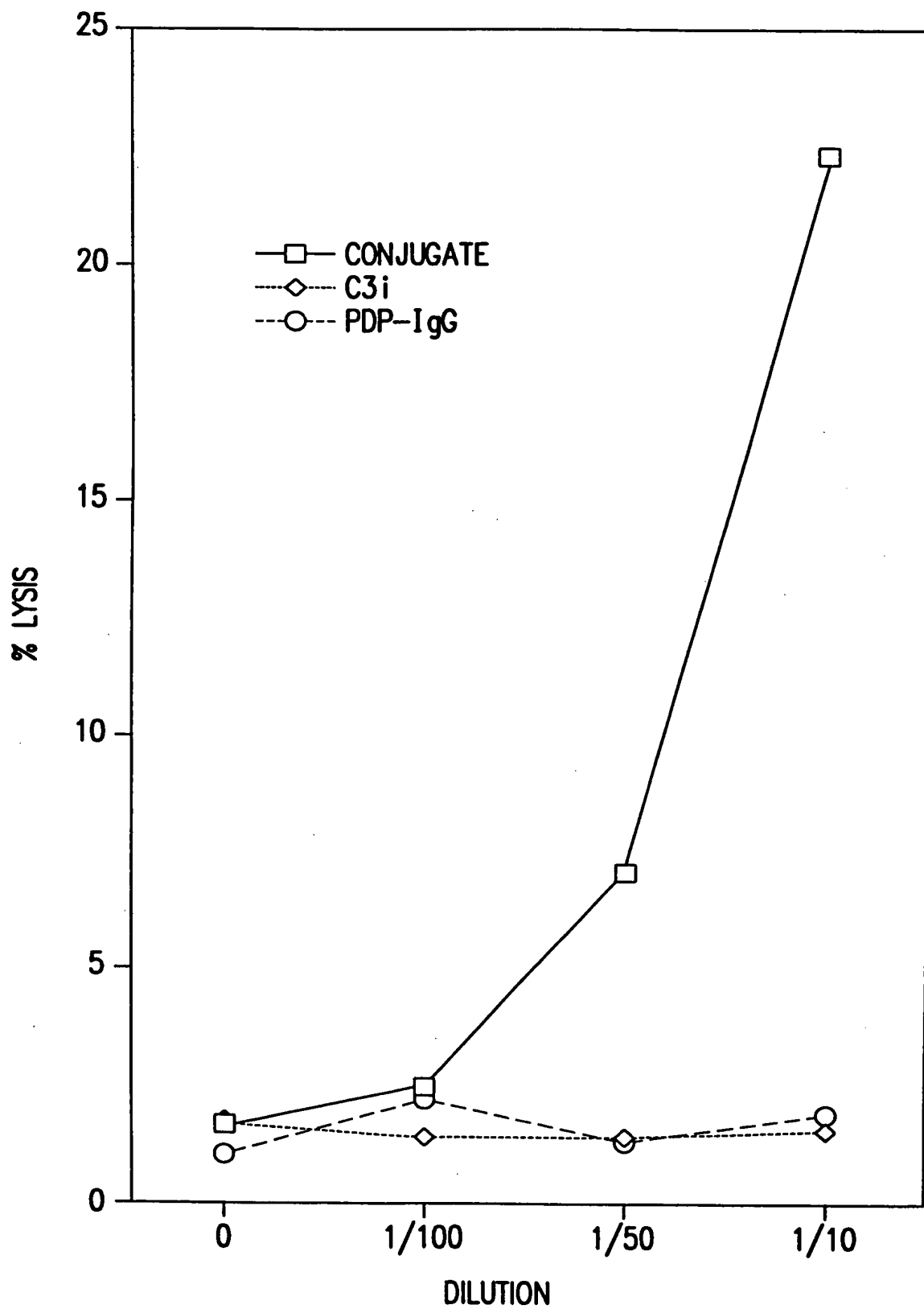


FIG.9

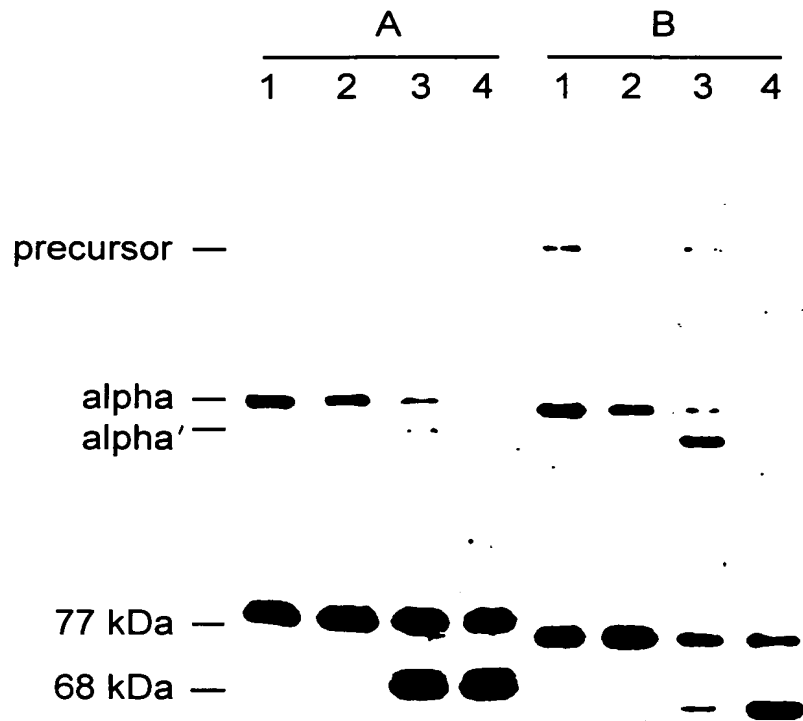


FIG.10



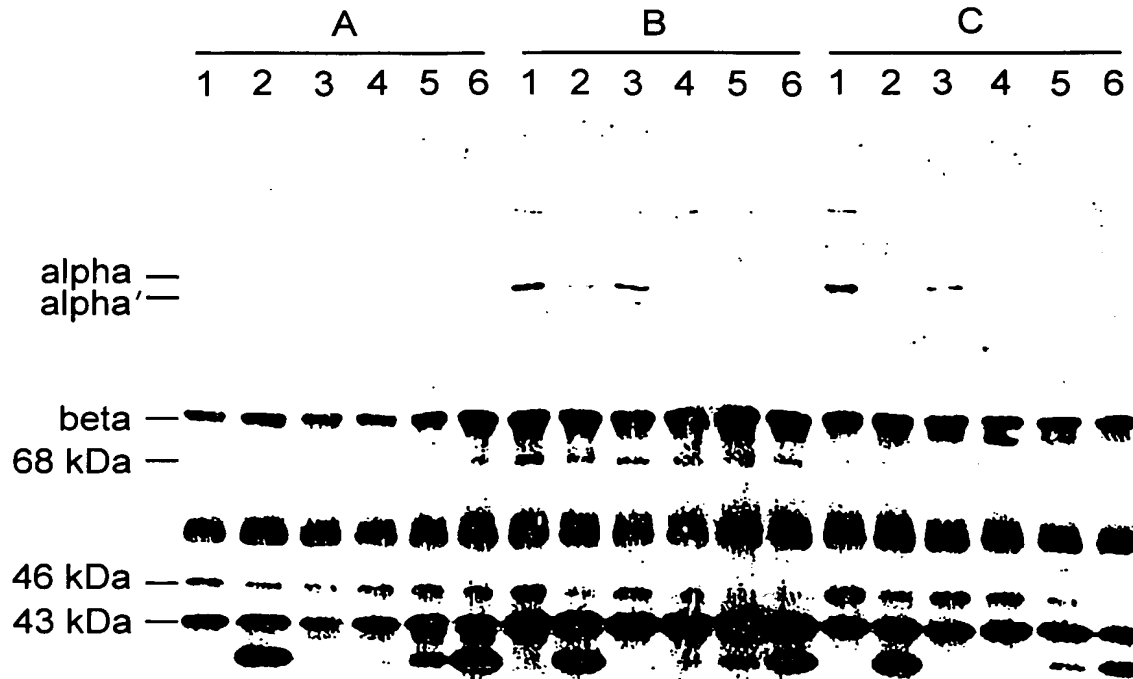


FIG. 11

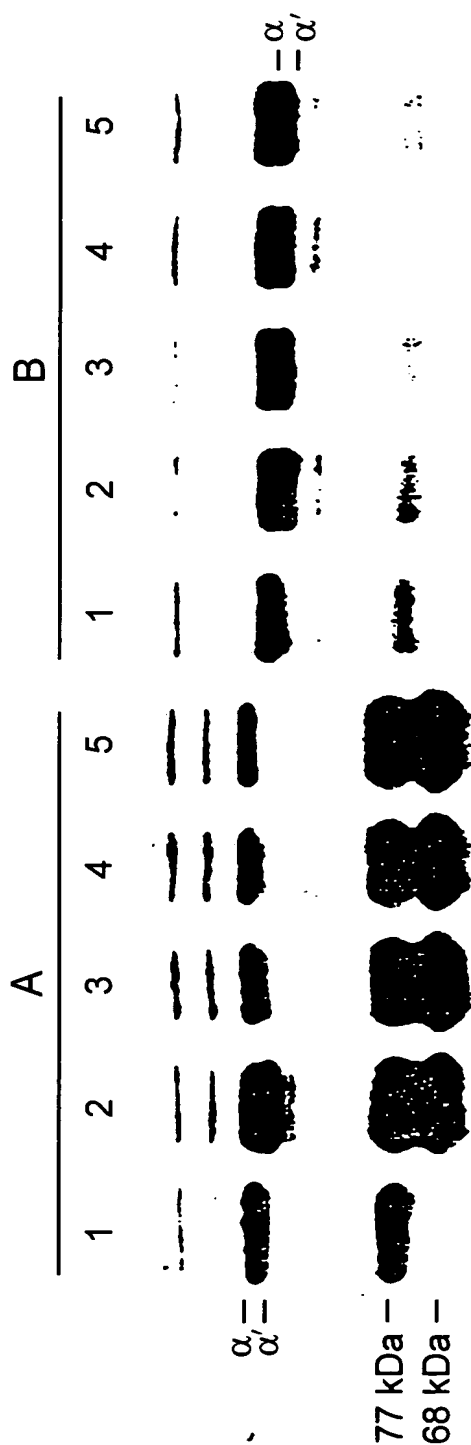


FIG.12

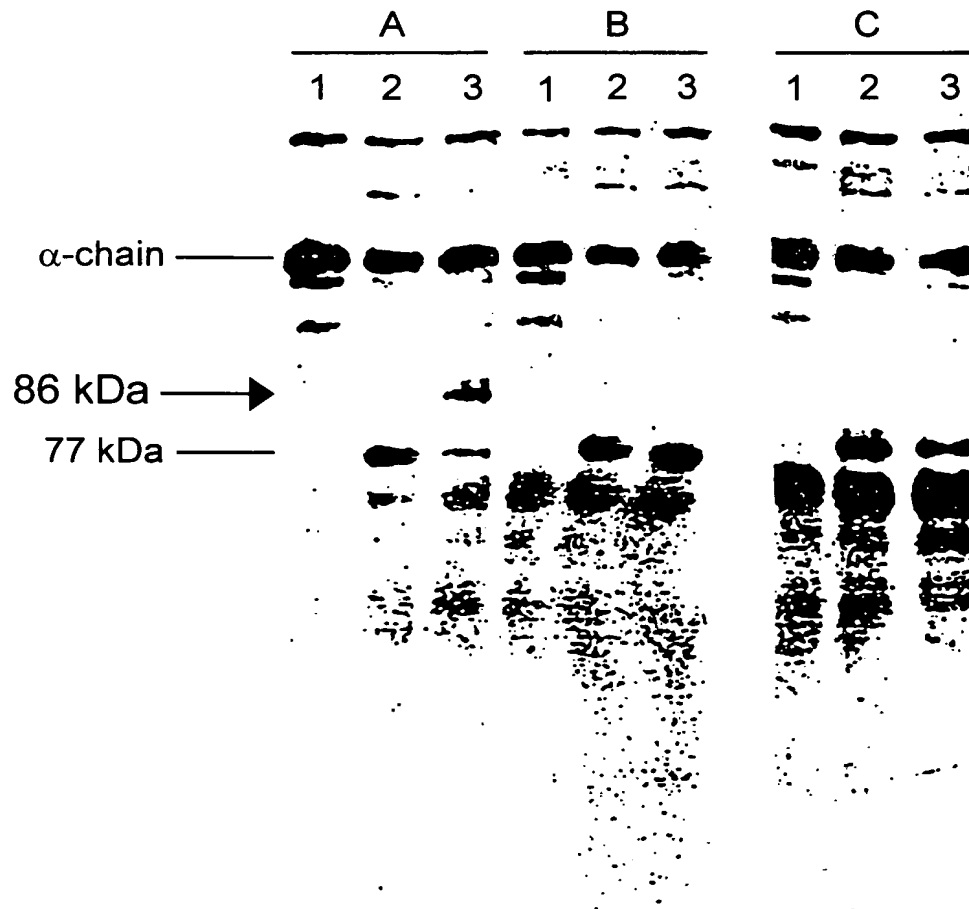


FIG.13

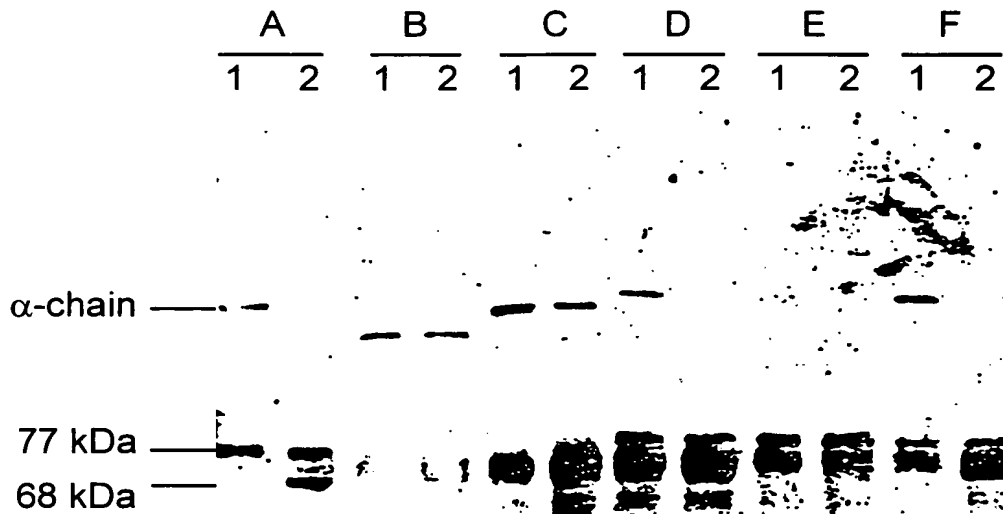


FIG.14

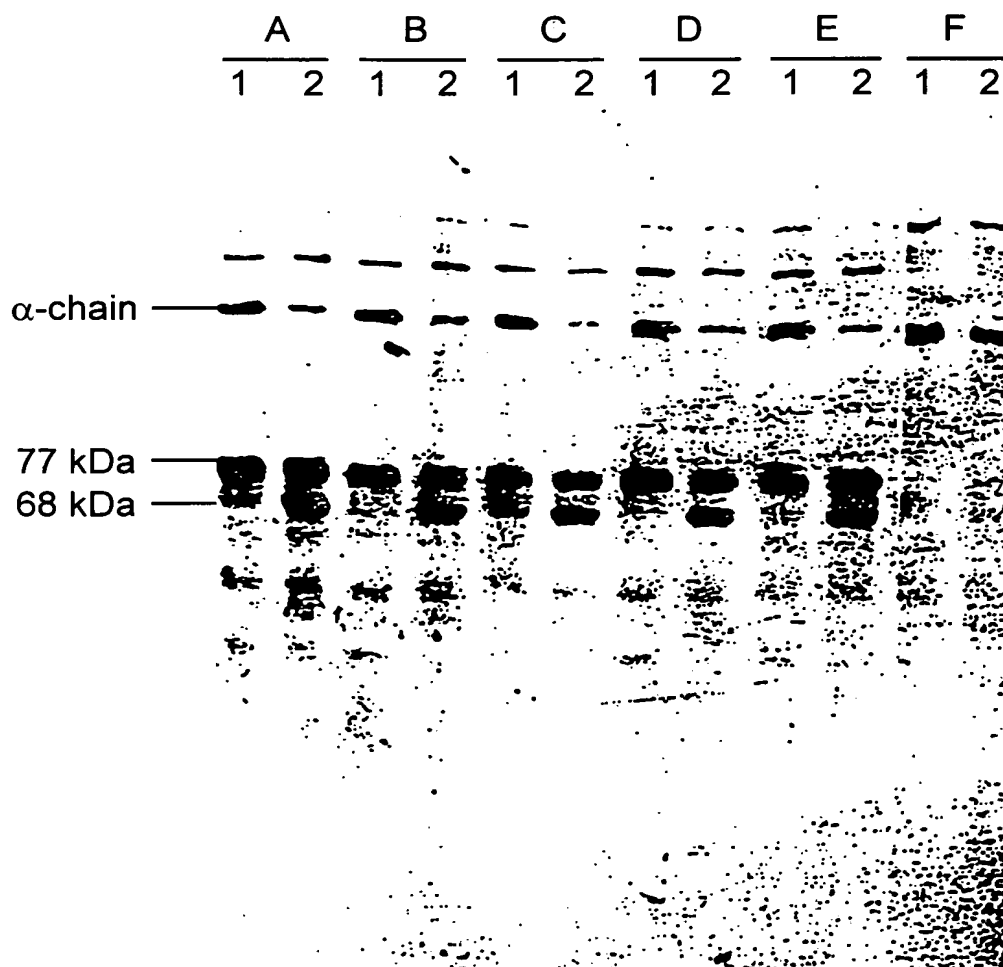


FIG.15

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